

From ECTS to EGS: Strains, Pains, Brains and Gains

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Keywords

European Credit Transfer System, European Grading System.

Introduction

The sub-title of the paper is an explicit recognition of specific features relating to the process of changing the method of assessment and grading in higher education within the European Union, namely:

- that strains on the academic staff are inevitable, given the growing pressures for European integration within a wider (25 nations plus) community;
- that irrespective as to whatever or wherever change takes place in higher education, (be it in curricula design and delivery, assessment and grading, etc.) it has to be undertaken by people who may be resistant to change, and who hence may find the process painful. Consequently, addressing the human dimension (through inclusive involvement) in securing successful change is paramount.
- that changes to the national higher educational systems, by their very nature, create large and complex problems, which hence necessitates very carefully considered policy responses, and sophisticated and sustained implementation strategies (brains).
- that the gains associated with a successful implementation may be greater than those initially sought.

The speed and complexity of European integration is accelerating, so that implementing change to meet the demands of creating the European Higher Education Learning Space is not a finite occurrence but part of an iterative process. Consequently, the successful implementation of initiatives like a new

European grading system is important not only in securing the known benefits (in respect of the portability of qualifications, and the mobility of students) associated with them, but in the longer term, in helping to facilitate an organisational paradigm in which future integration of the higher educational systems of Europe becomes less problematic.

Parentage: How did the ECTS come about?

Although it predates the Sorbonne Declaration, the use of the European Credit Transfer System really started when the Joint Declaration on Harmonisation of the Architecture of the European Higher Education System was signed by the higher education ministers of France, Germany, Italy, and the U.K. at the Sorbonne in May 1998. This declaration pledged commitment to a “common frame of reference, aimed at improving external recognition and facilitating student mobility as well as employability” This was to be achieved by the following: “a system of two main cycles, undergraduate and graduate ... for international comparison and equivalence,” through the use of credits (such as ECTS),” via “progressive harmonisation ... through strengthening of already existing experience” (Allegre *et al.*, 1998). This description suggests a process of organic incremental change between partner institutions, rather than a quantum policy leap required by all states.

However, just over a year later, the Ministers met again at the University of Bologna, and, on 19th June 1999 signed the Bologna Declaration. This document was signed by Ministers from 29 nation states – not only from within the European Union, but also outside it. The Bologna Declaration was different in both content and purpose from its predecessor, and pledged the signatories to “create a comprehensive pan-European higher education system within the first decade of the third millennium” (European Ministers of Education, 1999). To achieve this ambitious target within the agreed timeframe, the Bologna Declaration specified three crucial structural requirements. First a “system of easily readable and comparable degrees through the implementation of the Diploma Supplement.” Second, a “system with two undergraduate and graduate cycles, with access to the (post) graduate cycle requiring successful completion of first cycle degree, which lasts a minimum of three years and is relevant to the European labour market.” Third, a “system of credits – to promote the most widespread student mobility and covering both higher education and other contexts.”

Comparison of the Sorbonne and Bologna declarations shown in Table 1 below reveal important changes in emphasis. The Sorbonne Declaration assumed a process of natural organic convergence, without a time limit, while the Bologna Declaration was pro-active and much more economically and competitively orientated. In order to ensure the implementation of the Bologna Process, the Ministers agreed to meet regularly to evaluate progress and set up the Bologna Process Follow Group to monitor the implementation process. The shift in emphasis, from the academic to the economic, will be returned to later in looking at the stakeholders involved in the development of the European Grading Scale.

Table 1. Sorbonne and Bologna Declarations Compared.

Sorbonne Declaration	Bologna Declaration
European sphere of operations only	Promote European higher education world-wide
Academic benefits – best opportunities for students	Economic benefits – international competitiveness of European higher education
Objectives achieved via progressive harmonisation of existing strengths	Objectives achieved via action plan and explicit policy objectives
No stated time frame for progress	Completion within 10 years and progress to be monitored

Progress: How well has the implementation of the Bologna Process and ECTS gone?

Clearly great strides have been made in implementing the Bologna Process, but there has been little involvement of students and much work is still required to introduce a qualifications framework that includes both academic and vocational skills, although some states have done so at national level. At their last meeting in Bergen in 2005, the Ministers for Higher Education assessed progress in meeting the requirements of the Bologna Process. It was recognised that the three cycle qualifications framework (Bachelors, Masters, Doctorate) had been (or was in the process of being) adopted in the majority of countries in the European Higher Education Area, (with) generic descriptors for each cycle based on learning outcomes and competences. Quality assurance systems had been established in most EU countries, based on the criteria in the Berlin Communiqué and with a high degree of co-operation and networking, but that progress was still required in respect to student involvement and international co-operation. Additionally, recognition was being developed to enable complementarity between the the EHEA qualifications framework and the

proposed broader framework for qualifications for lifelong learning which would encompass credits from both general (academic) education and also vocational education and training, through accreditation of both prior certificated and experiential learning. Acknowledging these achievements in the resultant Communiqué, the participants of the Bergen meeting reaffirmed that “Ministers responsible for higher education in the participating countries of the Bologna Process ... all share the common understanding of the principles, objectives and commitments of the Process as expressed in the Bologna Declaration ... confirm our commitment to coordinating our policies through the Bologna Process to establish the European Higher Education Area by 2010, and commit ourselves to assisting the new participating countries to implement the goals of the Process” (European Ministers Of Education, 2005).

However, the most recent communique issued by the Commission to the Council and the European Parliament in May 2006 was rather more critical of progress and stated that “a major effort should be made to achieve the core Bologna reforms by 2010 in all EU countries: comparable qualifications (short cycle, bachelor, master, doctorate); flexible, modernised curricula at all levels which correspond to the needs of the labour market; and trustworthy quality assurance systems. This requires targeted incentives from the national authorities responsible in order to ensure proper take-up of the reforms rather than mere superficial compliance with the standards. Curricula in specific disciplines or professions should be renovated, drawing on comparisons and best practice at european level” (European Commission, 2006).

The Role of ECTS

All the previous meetings of the EU Higher Education Ministers (Prague, Berlin) have emphasised the central importance of ECTS to credit transfer, the fulfilment of the Bologna Process and the creation of the European Higher Education Learning Space. For example, the Berlin Communiqué of September 2003 stressed “the important role played by the European Credit Transfer System (ECTS) in facilitating student mobility and international curriculum development,” and indicated that ECTS is “increasingly becoming a generalised basis for the national credit systems.” However it was agreed that there was a need to encourage “further progress with the goal that the ECTS becomes not only a transfer but also an accumulation system” (German Ministry of Education and Research, 2003).

Similarly, the Bologna Process Stocktaking Report, produced by the Working Group appointed by the Bologna Follow Up Group, reported to the Bergen meeting that: “The great majority of countries are implementing the European Credit Transfer System (ECTS) in at least some programmes. In 20 countries, ECTS credits are allocated in the majority of higher education programmes, enabling credit transfer and accumulation, and in 12 countries ECTS credits are allocated in a limited number of programmes. In 9 countries, there is either a national system for credit transfer and accumulation that is compatible with ECTS, or the national credit transfer and accumulation system is being gradually integrated with ECTS” (Bologna Follow-up Group, 2005). Not surprisingly, the progress made with the growing use of the ECTS has been lauded within the European Union, and more especially within the European Commission. For example Viviane Reding, in her Opening Address at the EUA Convention of European Higher Education Institutions, in Graz, in May 2003, reported proudly that “More than one thousand universities have introduced ECTS in one or more departments, with Commission Socrates-Erasmus support. ... The Rectors gathered by the EUA in Zurich last year acknowledged the role of ECTS for transparency, recognition and curriculum innovation” (Reding, 2003).

However, systematic quantitative academic research into the implementation of the Bologna Process and the role of ECTS by Reichert and Tauch resulted in a rather more cautious appraisal. Examining progress in 2003, they wrote that “ECTS ... is undergoing rapid and far-reaching extensions before it has been properly understood and introduced in its original form in many institutions. ... the system is still applied in a very rudimentary or haphazard fashion to student exchange and credit transfer” (Reichert & Tauch, 2003). Similarly, their report in 2005 reported that “ECTS is being widely used for “student transfer”, and generally seems to work well. However, it is still often perceived as a tool to translate national systems into a European language, rather than as a central feature of curriculum design” (Reichert & Tauch, 2005).

This scepticism has been endorsed by experience of using ECTS as reported in academic journals. For example, Sullivan undertook a micro level institutional study of ECTS, based on anecdotal evidence from an exchange between a Swedish and UK university, and concluded that “Neither is ECTS grade transfer the simple matter that university literature promoting Socrates purports, nor does the transferred grade reflect a similar level of achievement to that which the home university claims to assume” (Sullivan, 2002). Similarly, Van Damme has argued

that ECTS “in its pragmatic and voluntaristic approach and with its reliance on a great deal of optimistic (some would say ‘naive’) trust and confidence, it has chosen to bypass questions of content comparability, educational culture and, of crucial importance, quality” (Van Damme, 2001).

Problems: What are the problems with ECTS?

In order to examine the problems with ECTS it is first necessary to look briefly at its mode of calculation. The ECTS is designed to act as a “grade converter”, enabling students to transport the grade outcomes of their studies quickly and easily across national boundaries. The ECTS uses norm-referencing for the calculation of grades, and the ECTS grades a student is granted for courses undertaken at a foreign university are determined by use of the ECTS grade definition table, given below. To calculate the ECTS Grades, all students successfully passing the evaluation or examination are listed, from the highest mark to the lowest. Then, within the list, the precise grade points for the five different ECTS percentile groups from ‘A’ to ‘E’ are established and lines drawn to indicate the dividing points between: ‘A’ = the top ten percent; ‘B’ = the next twenty-five percent; ‘C’ = the next thirty percent; ‘D’ = the next twenty-five percent; and ‘E’ = the remaining ten percent (table 2).

Table 2. ECTS grade definitions.

ECTS Grade	Percentage of students achieving the grade	Definition
A	10	Excellent – outstanding performance with only minor errors
B	25	Very Good – above the average standard but with some errors
C	30	Good – generally sound work but with a number of notable errors
D	25	Satisfactory – fair but with significant shortcomings
E	10	Sufficient – performance meets the minimum criteria
FX	NA	Fail – some more work required before the credit can be awarded
F	NA	Fail – considerable further work is required

Source: <http://europa.eu.int/comm/education/programmes/socrates/ects_en.html>.

By 2003, Reichert and Tauch found that two thirds of higher education institutions use ECTS for credit transfer but observed that “The basic elements and principles of ECTS seem simple enough, but its implementation in the

highly differentiated European higher education systems is fraught with all sorts of problems” (Reichert & Tauch, 2003). It is to some of those problems that we now turn.

Problems in Calculating ECTS

The widespread use of ECTS seemingly verifies its utility and simplicity in calculating grades. However, problems can occur in calculating ECTS grades. First, ECTS grades are only calculated for those students who achieve a pass grade on the assessment and the differences in the setting of pass marks means that the percentage of students who fail an evaluation/examination can vary from one country/institution/faculty/department/subject area to another. Hence, for example in the United Kingdom, the pass mark is generally set at 40%, while in Greece the pass mark is set at 5 out of 10 (that is, 50%). So it is likely that at a Greek university, the ECTS grades will be calculated on a smaller cohort of students than would occur for the same unit if it was taught at a university in the U.K. Secondly, where the number of students taking the course is low (say less than 10 students), it may be difficult to calculate the ECTS grades with any accuracy. One approach to this problem, which is suggested on the EU Socrates Website, is to collect data on the grades of successful students in the same course over time. It is then possible to identify the ECTS grading boundaries and award the correct grades. However, even this solution is unlikely to enable the calculation of ECTS grades in the first few years of a new course, when it is likely that student numbers taking the unit will be low. In addition, using this method of collating historical data means that the student's performance is not being measured against the current cohort of students but historically, against all previous students. This can clearly create anomalies, for if a student takes a course in which the class size is 20, he will have his performance measured against that of all previous students on the course, while if he takes a course with a class size of 200, his ECTS grade will be calculated with reference to his current peers only.

A further problem with ECTS calculation is that some European higher education assessment systems have very few grade points. For example, within the Hungarian system successful students are awarded one of four grades from 2-5, on a grading scale of 1-5, with two as the pass grade. Similarly, in Finland the grades go from 1 (Välttävä = Sufficient) to 3 (Erinomaiset Tiedot = Excellent), with intermediate grades used in some institutions, but not all. Hence, using these national grading scales results in very large students groups, and makes it

difficult to map the grades on to the ECTS categories. Introducing some form of intermediate grade marking within the national systems for the assessment of foreign students can overcome this problem, although faculty may find it difficult to determine intermediate grades where they are in contravention of national schemes and academic customs. This problem is heightened when the national grading scheme is descriptive and non-numeric, as in the case of Sweden, where students are allocated three non-numeric grades: Rest (Conditional Pass), Godkänd (Pass), or Väl Godkänd (Pass with distinction). In such circumstances, it becomes necessary to use a qualitative approach and attempt to match the verbal descriptions used within ECTS grading system with national grading descriptors. Although this can be done, it is a highly imperfect process, given that that terms used within ECTS ('excellent', 'very good', 'good', 'satisfactory', 'sufficient') can be interpreted in very different ways across Europe.

Problems in Using ECTS

The grading systems of some national higher education systems can create difficulties when calculating ECTS rank categories, but the majority of nations have numeric systems which are sufficiently comprehensive to allow ECTS grades to be calculated. However, further more serious problems occur with the use, rather than the calculation, of ECTS grades. First, the vast majority of grading systems used in higher education in EU member states are criterion-referenced and hence attempt to determine a student's grade by comparing his or her achievements with implicit or explicit stated standards for particular levels of performance, and usually through the achievement of learning outcomes. Hence, it is possible that all students on a course using criterion-referenced marking for assessments could receive very high (or very low) grades, depending on the levels of individual performance against the established criteria for the achievement of learning outcomes. Hence, a student may obtain a high grade via criterion-referenced marking, but still be only given an ECTS grade 'C', as his/her peers also obtained high grades via criterion-referenced marking. Conversely, as norm referencing means that a student's grade depends not only on his or her level of achievement but also on the achievement of others, even if all students on a course passed with very low grades via criterion-referenced marking, 10 percent of them would, nevertheless, be allocated an ECTS grade 'A', through its norm-referenced system. Hence although learning outcomes and competences are now central to the EHEA qualifications

framework, and students' achievement of learning outcomes is criterion-referenced, the ECTS is norm-referenced.

Secondly, difficulties arise when trying to interpret ECTS grades awarded in other institutions. As ECTS grades are norm-referenced, they are of limited use in attempting to transfer grades between different national grading systems, which use criterion referencing. Hence, a student obtaining the grade of 30 e lode for a course offered by an Italian University probably would be given an ECTS 'A' grade. Translating this grade into (say) a British equivalent is difficult, as Italian Universities designate circa 14 percent of all grades at 30 e lode, while in the U.K., typically only 8 percent of students are awarded first-class honours; moreover, there is huge subject variation within the U.K. grading system (and, one suspects, in other European states). Hence Yorke *et al.* (2002) found that 22 percent of U.K. first degree awards in Mathematics were at first class honours level, while the comparable figure for first class honours in Law degree awards was only 4.1 percent.

Thirdly, custom and practice have tended to move the perception (and use) of ECTS away from norm to criterion referencing, and in an ad hoc unsystematic way. For example, the detailed ECTS Guidance Notes provided for Latvian Universities (now seeking to participate in the European Higher Education Area) by the national Academic Program Agency state: "It is quite possible that, once the percentile groups represented by the ECTS grades from 'A' to 'E' have been established, one or more of them may be found to equate very closely to such groups established by the local grading scale. This coincidence may be close enough for it to be possible to award, year-on-year, the ECTS grades according to groups created by the local grading scale. ... Where near total correspondence has proved possible between a local grading scale and the ECTS grading scale, some institutions have been able to print 'straight-line' conversion tables from their local grades into ECTS grades. ... institutions which discover clear and direct lines of comparison with ECTS grades are greatly encouraged to exploit this coincidence" (Latvian Academic Program Agency, 2006).

Similarly, the English ECTS Guidance notes issued by the Europa Website state: "in assigning an ECTS grade 'A', a British institution awarding first-class honours to 8 percent of its students may well decide to retain the same definition of 'Excellence' for the ECTS Grade" (European Commission, 2004). Such strategies, where adopted, represent a corruption of the norm-referenced rationale behind ECTS, and moreover could disadvantage students – in the example cited, 2 percent of successful students would be denied the ECTS grade 'A'. More

fundamentally, it is difficult to endorse a grading scheme in which the student's award may ultimately depend on the successful exploitation of coincidence.

Students' understanding of the mechanisms of assessment and grading are critical given that, as Brown observed, "assessment defines what students regard as important, how they spend their time and how they come to see themselves as students and graduates" (Brown, 2001). Hence a student taking an ECTS graded unit will ask the local tutor how much effort will be needed for a pass and an ECTS 'A' grade. Successful exploitation of the happy coincidence between the norm-referenced ECTS and institutional and national criterion-referenced grading systems is apparently widespread, making it simple to advise incoming students how much effort is required to gain the different norm-referenced ECTS grades, and how these relate to the internal national and institutional grading systems, which are usually criterion-referenced.

Most critical of all, however, is the fact that a detailed empirical analysis of case studies of the use of ECTS (Karran, 2004) points to huge variation in the ways in which ECTS grades are mapped on to institutional/national grades. Despite the fact that ECTS grading is a norm-referenced system, while the national systems are criterion-referenced, the ECTS conversion tables provided by universities for use by students and staff indicate straight line transference from institutional to ECTS grades, but such tables are rarely consistent, and there are huge variations both within and between different universities in the same nation state, as table 3 below demonstrates. In essence the use of ECTS has national coherence in some states, but is applied differently by individual universities within others, making it more akin to a lottery than a scientific and fair method of allocating grades for students for accurate transference between different institutions and countries.

Table 3. Variations in the use of ECTS within different countries.

	Nation and Local Score (Obtained score/Max score)			
	France 15/20	Greece 7.4/10	Italy 28/30	Netherlands 7.3/10
University 1, ECTS grade	B	C	B	D
University 2, ECTS grade	C	B	B	C
University 3, ECTS grade	A	C	C	B
University 4, ECTS grade	B	C	A	D
University 5, ECTS grade	B	B	B	D
Lucky student	A	B	A	B
Unlucky student	C	C	C	D

Source: The author.

Peculiarities: EU variations in grading systems

ECTS was set up to deal with the assumed incompatibilities between the grading systems of the higher education institutions within the nations of the European Union, in order to enable greater integration and student mobility. However, for integration to take place, first it is necessary to assess the comparative differences between the nations. Only once this is done, is it then possible to develop accurate policy instruments, which either allocate appropriate resources to the individual nations in accordance with the comparative differences identified, to enable all states to reach the same level of provision, or (as in the instance of ECTS) provide other means to enable integration. However, during the process of the development and implementation of ECTS, no-one had posed the simple (yet hard) question: what is the extent of the similarities and differences within the grading systems used in Universities in the 25 nations of the European Union?

However, in 2005, a comparative quantitative study of all the grading schemes of the higher education systems of the European Union was undertaken which revealed that, although there were evident differences between the different systems, the degree of similarity between the systems was greater than the degree of diversity (Karran, 2005). In essence the study reported the following findings:

- Criterion Referencing – with minor exceptions, all EU h.e. systems use criterion referencing.
- Numeric Grading Scales – universities in all EU member states, with one exception, use a numeric system of grading allied to the use of grade descriptors.
- No Universal System – there is no predominant grading system, but the most common ones are the 1 (lowest) to 10 (highest) scale, used in five nations, and the 1 to 20 scale, used in another five nations.
- Pass and Fail Grades – there is no common pattern in the number of pass/fail grades awarded in each system, but it is unusual for grade scales to be symmetric about the pass mark, in most systems there are more grades above the pass grade than below it.
- Pass Grades – the number of grades varies greatly – nine nations use a system with four grading categories, seven nations use a five point scale, and four nations use a six point scale.
- “Maximum” Grade – most grading systems have, at the top of their range, a category for the most excellent.

- “Minimum” Grade – at the bottom end of the scale, most systems have a minimum ‘Satisfactory’ or ‘Sufficient’ grade.
- “Average” Grade – between the minimum pass and the very highest grades, all nations have grades representing ‘Good’ and ‘Very Good’, but the degree of differentiation in these grades, which will be awarded to the majority of students, varies greatly from one nation to the next.
- Pass Mark – the most common pass mark borders on the equivalent of 50 percent, i.e. between 48 and 51 percent, and used by more than half of EU nations.
- Fail Grades – most systems have only one fail grade, (‘Fail’, ‘Not Sufficient’, ‘Unsatisfactory’, or ‘Poor’), but some allow for the possibility of retrieval through deliberation, and others discriminate between various levels of failure.
- Recovery of Failure – most countries allowed at least one attempt at re-sitting failed assessments, and virtually all the different systems allowed the full re-sit mark to stand.

Hence this study demonstrated that the degree of similarity between the systems was sufficient to suggest that a common European Grading Scale was feasible. Moreover, this analysis identified the most common features which could form the basis for a European Grading System which were:

- Criterion-referenced – against the achievement of agreed learning outcomes.
- Pass mark set at 5/10 or 10/20, above which there would be a satisfactory grade, students would have the right to at least two re-sits without penalties for re-assessment.
- Ascending grading system based on a 1-10 or a 1-20 scale, with each scale category equal in size.
- Five or more pass grades, with one reserved for the very best students, but which would allow different categories among the average and good students (by far the largest groups) to be readily discerned.

Principles: What could/should the EGS do?

Why do we need a European Grading Scale?

There are two basic reasons why a European grading scales are needed, mobility for students and their academic credits, and to ensure equity of treatment for students in respect of grading.

In respect to credit mobility, within the global knowledge economy, credits for qualifications are the currency of the emerging borderless education market place, and systems of credit transfer (like ECTS) define the rate of exchange. The ability of universities to deal with credit and assessment issues will be important to their success within the global knowledge economy and the information society. First, if universities do not offer units with widely accepted credit values, they will be unable to attract students from both home and overseas markets, who will not enter programmes if the resultant qualifications have limited recognition elsewhere with other universities and employers. In essence, universities need to develop a “global currency for higher education qualifications” (Randall, 2001), because if their programs don’t provide credits that are recognised, they will be denied access to the new global educational market at a time of “rapid growth in the number of students enrolled educational institutions outside their home country” (O.E.C.D., 2002). Conversely, universities that are unable to recognise the credits of other institutions, will be unable to recruit students, especially at post-graduate level, both from other educational institutions providing accredited academic qualifications and also from professional associations and organisations that certificate vocational practice and experience.

Furthermore, job applicants will judge the credibility of a University seeking to recruit new staff in terms of the value attributed to its qualifications by students, other universities, and the distribution of its alumni within multinational companies. In addition, the encroachment of market forces in education and the adoption of consumerist attitudes by students, many of whom study while working and pay tuition fees themselves, necessitates assessment procedures and protocols that are sufficiently well-grounded and professional in execution to resist both institutional audit by the growing number of national and supra-national quality agencies (e.g. the European Network for Quality Assurance in Higher Education), and the possibility of litigation action by students. At a strategic level, the inability of universities to align their credit systems to others will limit the possibility of building critical mass in the global borderless education market by collaboration, not only with other universities, but with other major knowledge-centred corporate players.

In respect to equity, there have been repeated academic studies of the vagaries of the British grading system to determine, *inter alia*, why there are different distributions of degree grades between different subjects and universities. As was previously considered, Yorke *et al.* (2002), for example, found that 22 percent of

UK first degree awards in Mathematics were at first-class honours level, while the comparable figure for first class honours in Law degree awards was only 4.1 percent, and that this variation appeared to have little relationship (if any) to any other identifiable measure of input. Further work by the same group demonstrated that "... the honours degree classification is considerably less robust than its supporters would prefer" (Yorke *et al.*, 2004). Similarly, Woolf and Turner (1997) conducted an investigation based on student records from seven institutions and found that when students' results were re-classified using the systems of universities other than their own, 15 percent were allocated to degree classes which differed from those awarded by their home institutions. Furthermore Parlour, following an analysis of results on a modular degree programme, concluded that "... except in the most limited circumstances, it is impossible to define rules that can ensure that the British honours degree classification process conforms to the basic principles of comparative justice" (Parlour, 1995). Informal discussions with colleagues elsewhere in Europe indicates that similar variations occur in other nations

Continuing to use a particular grading system, in the knowledge that it (dis)advantages one group of students over another, may be less reprehensible than deliberate favouritism in marking – but is none the less undesirable. A unified grading system, at national and european levels, by its very generality would be more transparent than the existing mix of grading mechanisms. This would make the abuse of academic freedom through favouritism in marking much less likely, while ensuring that principles of justice and fairness, deemed central to academic freedom, are upheld in the interests of staff and students alike. Being asked to used a particular marking scheme might be construed as undermining academic freedom, However as Edward Shils, points out "the justification of academic freedom is that it protects the moral and intellectual integrity of the teacher" but that "... there are certain activities performed (or not performed) by academics which are not entitled to the right of academic freedom. These include ... deliberate distortion and favouritism in marking examinations" (Shils, 1995).

The Requirements of a European Grading Scale?

Work undertaken by the EGSWG in its meetings, and subsequently continued via lengthy email discussions, enabled the basic requirements for a European Grading Scale to be established. In essence, such a grading system would:

- be criterion-referenced and based on the relative achievement of learning outcomes;
- be sufficiently distinct from existing national systems, so as to ensure implementation as a new system, rather than as an “add on” through a translation of existing systems;
- be applicable to all kinds of assessments (oral, written, group, time constrained, etc.) across a wide range of academic disciplines, at undergraduate, master’s and doctorate levels;
- be able to reflect levels of both theoretical and applied knowledge and both subject specific and generic skills and abilities;
- apply uniform pass/fail benchmarks to enable progression;
- enable identification of excellence, permitting entry to higher degrees;
- allow students to monitor their learning progress;
- accurately monitor the impact of teaching;
- provide a differentiated ranking of grades to reflect a range of different abilities against agreed standards of knowledge and competence;
- encourage students to strive for excellence – all grades must be achievable;
- enable retrieval of failure without diminution of the grade obtained in the re-sit;
- be universally applicable across a range of disciplines and nations, in an easy, transparent, and equitable fashion.

The major element for EGS that was not agreed by the Working Group was the range of assessment scores and the number of grades. In practice these elements are linked – if a relatively coarse grained range of assessment scores (for example 1-20) is used, then it is more likely that there will be fewer grades than if the range of scores used is much broader (for example 1-100). Similarly, there is little point in asking a Professor to score an assessment with some precision within the range of 1-100 (e.g. awarding it a score of 65 rather than 62), if there are only two grades of pass and fail which the student can obtain, and the pass mark is 50 out of 100.

Prototypes: The European Grading System Working Group and the Tuning suggestions

Following the publication of the analysis of higher education grading systems in Europe which demonstrated that a common European Grading Scale was feasible, in December 2005, the European Commission established a Working Group (EGSWG), to undertake preparatory work on the development of a European Grading Scale. The group comprised nine members only, one from each of the academic communities in France, Germany, Lithuania, the Netherlands, Norway, Spain, and the United Kingdom, plus a representative from both ERIC/Naric and the EU Commission. The Group only met twice – on 3th December 2005, and February 7th 2006, after which it was wound up by Peter van der Hijden, from the EU Commission, with the assumption that the work would be carried forward by the Tuning Group.

Despite only meeting twice the EGSWG produced some useful recommendations for a European Grading Scale, which were as follows:

- Learning Outcomes – the grading scale will be used to describe students' relative achievement of learning outcomes, which demonstrate the possession (or otherwise) of specific and generic competences.
- Pass Mark – must lie in the middle of the range of assessment scores – e.g. if the assessments are scored at 0-60, the pass mark will be 30.
- Recovery of Failure – the number of re-sit attempts permissible will depend on national and institutional regulations, but the score (and associated grade) obtained in a re-sit will not be subject to limitations.
- Fail Grades – there should be only two fail grades – the range of assessment scores below the pass mark should be divided into two rank categories of scores only.
- Pass Grades – there should be between 5-10 pass grades, each grade having the same numeric range of assessment scores in it, and established so that each grade contains whole numbers only.
- Grade Descriptors – each grade must be criterion-referenced and relate to the relative achievement of learning outcomes by students.
- Subject Consistency – all grades must be actively used for all subjects, in a systematic fashion that relates to the achievement of learning outcomes.

However, although this is a useful beginning, the deliberations of the EGSWG had evident limitations. First, the membership was restricted to representatives from only seven of the European nations. Clearly, for such an important policy initiative as a European Grading Scale, at the very least representatives from all the EU nations would need to be involved, and there is a strong argument for including other participants of the Bologna Process who are located outside of the EU. In addition there was no attempt to involve other stakeholders who would have a clear interest in the development of a European Grading Scale. For example The European Association for Quality Assurance in Higher Education, Report to Ministers meeting in Bergen 2005 acknowledges that: “The assessment of students is one of the most important elements of higher education” and argues that “some fundamental principles should permeate the whole work ... (e.g. the consideration of) the interests of students as well as employers and the society more generally in good quality higher education” (ENQA, 2005).

Similarly, the report A Framework for Qualifications of the European Higher Education Area states: “The development of any framework of qualifications must take into account the need to develop trust among the various stakeholders and confidence in the integrity of the resultant framework. It is vital to identify the stakeholders and advance consensus-building mechanisms in framework development. An important way to build trust and acceptance is to ensure that any top-down approach is fused with a bottom-up process. ... The stakeholders may include: learners/students; providers of education and training; government and appropriate government agencies; awarding bodies; higher education professors/teachers; employers and the business sector; trade unions; community and voluntary organisations; professional bodies; etc.” (Bologna Working Group on Qualifications Frameworks, 2005). However, despite this explicit expert advice of the need to involve both students and other stakeholders in the determination of qualification frameworks, these groups were not included in the deliberations of the European Grading Scales Working Group.

Clearly, however, any European grading system must be able to address the needs of a hierarchy of stakeholders and potential users including:

- Students, seeking credits for academic advancement.
- Teaching staff, assessing the impact of their teaching efforts.
- Universities, ensuring quality assurance standards are met.
- Employers, seeking to recruit well qualified staff.
- Governments, pursuing national policy objectives.
- The EU, trying to create the European H.E. Area.

A further limitation of the group's activities was that it only had two meetings. Clearly, it took more than two meetings to establish the ECTS, and therefore one would expect that more than two meetings would be required to create its potential successor. The meetings of the Working Group should have marked the start of the development process of the European Grading Scale, by defining the problem, identifying the stakeholders, planning the necessary activities, agreeing the time frame, etc. At the second meeting of the Group, it was announced that further work in connection with the development and implementation of a European Grading Scale would be undertaken by the Tuning Group.

Analysis of the proposals provided by the Tuning Group at the meetings of the EGSWG revealed them to be conceptually flawed, poorly thought out, and based on unsupported assertions rather than empirical data. However, what is more problematic is whether the Tuning Group's approach is relevant to, and appropriate for, the development of a European grading scale. The first Tuning Report states explicitly that: "The Tuning project does not pay attention to educational systems, but to educational structures and content of studies. Whereas educational systems are primarily the responsibility of governments, educational structures and content are that of higher education institutions. ... The name Tuning has been chosen for the project to reflect the idea that universities do not look for harmonisation of their degree programmes or any sort of unified, prescriptive or definitive European curricula but simply for points of convergence and common understanding" (González & Wagenaar, 2003). Clearly the creation of a European Grading Scale lies outside of the brief defined by the Tuning Project, as any scale would relate not to structures or content, but to all of the educational systems of the EU nations.

In essence the reference points for work by the Tuning Group lie within the differentiated domains of individual subject curricula, while the basic principle of the European grading scale is that it operates without differentiation across all the subject areas. However, in justification of allowing the Tuning Group to develop the European Grading Scale, it was stated by members of the EGSWG that the European Qualifications Framework provides the necessary background to the comparability (of grading scales and systems), but only in global terms. Further, it was argued that comparability will in fact be described at subject level, as this is the rationale behind the Tuning Project with its emphasis on subjects rather than procedures and that it is here that subject-level work must be done to define the marking and indeed grading cultures across the European Higher Education Area.

However, such a discipline based approach is in direct contradiction to the spirit, if not the content, of the Bologna Process, which indicates that comparability between, and integration of, EU h.e. systems should be pursued between national frameworks rather than across subject domains. For example, nowhere in the European Qualifications Framework is there support for the notion that comparability will (or should) be across nations within subject domains, rather, as its conclusions make clear, it recommends that: “the framework for qualifications in the European Higher Education Area should be an overarching framework with a high level of generality” (Bologna Working Group on Qualifications Frameworks, 2005).

Moreover, the EQF’s advice of good practice states (p.104): “the development and review process for producing good national frameworks are most effective when they involve all relevant stakeholders both within and outside higher education. Higher education frameworks naturally link to vocational education and training and post-secondary education and as such are best viewed and treated as a national initiative. This also makes possible the inclusion of, or links to, other areas of education and training outside higher education.” This therefore raises the question: how can other external stakeholders become involved in the creation of any European Grading Scale, if this exercise is couched within the subject based approach that epitomises the work of the Tuning Group?

More importantly, allowing (or even encouraging) different grading cultures and practices to emerge, through the adoption of a subject based approach to the derivation of the EGS, may reduce grading discrepancies between nations within individual subjects, but not between subjects. In essence, such an approach to a European Grading Scale would fulfill the need for credit and student mobility,

but not for equity of treatment. Adopting a subject based approach to deriving a European Grading Scale, would fail to address the problem of discrepancies in the range and use of grades that are awarded between different subjects, within nation states. Failing to address this problem of inequity, more particularly whilst at the same time being fully cognisant of it, would be doing future students, and the cause of European higher education a grave disservice. A student's ability to get an above average grade in his/her degree should not vary just because the student is studying law rather than mathematics, and university tradition dictates that, despite using the same grading system, a smaller proportion of law students achieve above average grades.

Historical tradition dictated for many years that women were not permitted to enter universities in order to study for a degree, and had restricted access to particular professions. However, following Article 21 of the Charter of Fundamental Rights of the European Union, it is accepted across the EU that we should not treat people differently in respect of their age, gender, colour, creed, nationality, etc., when they are applying for a job. Nowadays a first degree (irrespective as to subject) is becoming a generic requirement for entering the job market at a particular level. Why, therefore, should a system of grading in higher education across Europe be created deliberately which is subject based and which, therefore, because of historical traditions which have no empirical or moral justification, continues to perpetuate differential employment possibilities for students of the same ability, on the basis of their choice of degree subject? More fundamentally, would any such new system that was designed to allow iniquitous treatment to continue unchecked, be in breach (technically, if not de facto) of Article 21?

Pragmatics: What is the best way to proceed?

Empirical studies of both existing national grading systems and the ECTS have shown them to be flawed in various ways, and demonstrated that there is a vital need for reform if the Bologna Process is to be fully and successfully implemented, and the European Higher Education Area created. Hence there is an opportunity to create a grading scale for all the European Universities, which recognises the needs of all stakeholders and ensures that students are treated with fairness and equity in the allocation of grades for their achievements, irrespective as to their chosen academic subject or the country in which they are studying. In order for any grading scale to be successfully developed and implemented, there needs to be a widespread discussion between, and

involvement by, all possible stakeholder groups who may have who may have an interest in the outcome.

The following approach is indicative rather than prescriptive, but should be sufficient to kick start the initial process of political debate, policy formulation, and generate the ideas and project proposals necessary for the European Grading System to be successfully developed.

- Create five Regional Project Teams, each with academic, student, and employer representatives from 5 EU states.
- Organise parallel meetings of the five Regional Project Teams to discuss the success/failure of national grading schemes in meeting the needs of major stakeholders.
- Organise a colloquium in Brussels, for the Regional Project Teams to present their findings, run three parallel workshops for each stakeholder group and produce an interim report of findings.
- Establish a EGS Development Group, with 4-5 people nominated by each of the five regional project teams.
- Produce draft recommendations for the EGS, disseminated via the Regional Project Teams.
- Hold EGS workshops for each of the five Regional Project Teams to gather feedback on proposals.
- Work with NARIC network and ECTS National Co-Ordinators to identify universities and courses to test the EGS.
- Pilot test the EGS alongside the national grading system and the ECTS. Produce pilot project report and disseminate findings.
- Organise a colloquium in Brussels, to disseminate and review the findings of the pilot project, and make changes, to the EGS.
- EGS Development Group to produce definitive documentation for the EGS, and start to consider time frame for its implementation.

As Olli-Pekka Heinonen (the former Finnish Minister of Education and Science) has observed “Institutions of higher education are in a cross fire of expectations. They are expected to promote the economy and employment, to provide solutions to global environmental problems, to be strong cultural centres, etc. The public at large expect them to solve the burning global, national and regional problems of our times. Young people place their hopes in higher education institutions, expecting to get qualifications which guarantee

them a place in tomorrow's society" (Heinonen, 1997). Creating a European Grading Scale will be a long and arduous process, however, if it is successful, it would form the cornerstone of the Bologna Process and act as a lever for further integration both of the higher educational systems operating within the European Union and of the individual nation states in which they are located. As university teachers, we have the professional responsibility to take the lead in evaluating and altering the ways in which we assess, in order to ensure that all our students have their scholarly achievements graded fairly and in such a way that maximises their career opportunities and life chances. As Europeans, we have a broader moral duty to work together to realise the largest and most important socio-economic and political development which has ever occurred in the long history of Europe – the creation of the European Union, and the process of integration among the 25 (and more) member states.

Higher education in Europe and beyond is in a process of acceleratory change and reformulation. Assessing such trends, Bjarnson has opined that "doing nothing is not an option for higher education. Courage and creativity will be essential ... to rise to the challenges" (Bjarnson *et al.*, 2000). It is evident that a European Grading Scale is both possible and needed, as part of the Bologna Process and the integration of the states of Europe – we know it can and should be done. In this respect the advice given by Goethe should be an inspiration to us all: "Whatever you can do, or dream you can do, begin it. Boldness has genius, power, and magic in it."

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